

A NEW OECOPHORID GENUS AND SPECIES (LEPIDOPTERA: OECOPHORIDAE)¹ FROM CHINA

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ABSTRACT: A new oecophorid genus *Epiracma* is proposed to accommodate two Chinese species: *Epiracma dilatata* sp. nov. and *Epiracma aedeagifera* (Wang, Liu et Li). Photographs of the adults and the genital structures are provided.

KEY WORDS: Lepidoptera, Oecophoridae, *Epiracma*, new genus, new species, China

The genus *Epiracma* gen. nov. is proposed based on the study of the three genera closely related to it: *Irepacma* Moriuti, Saito and Lewvanich, *Ripeacma* Moriuti, Saito and Lewvanich, and *Periacma* Meyrick. The type species, *Epiracma dilatata* sp. nov., is described based on the specimens collected by light trap from Mt. Fanjing, Guizhou Province, China. *Epiracma aedeagifera* (Wang, Liu & Li) is transferred from *Irepacma* to the present genus, with the female described for the first time. The type specimens are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China.

Epiracma gen. nov.

Type species: *Epiracma dilatata* sp. nov.

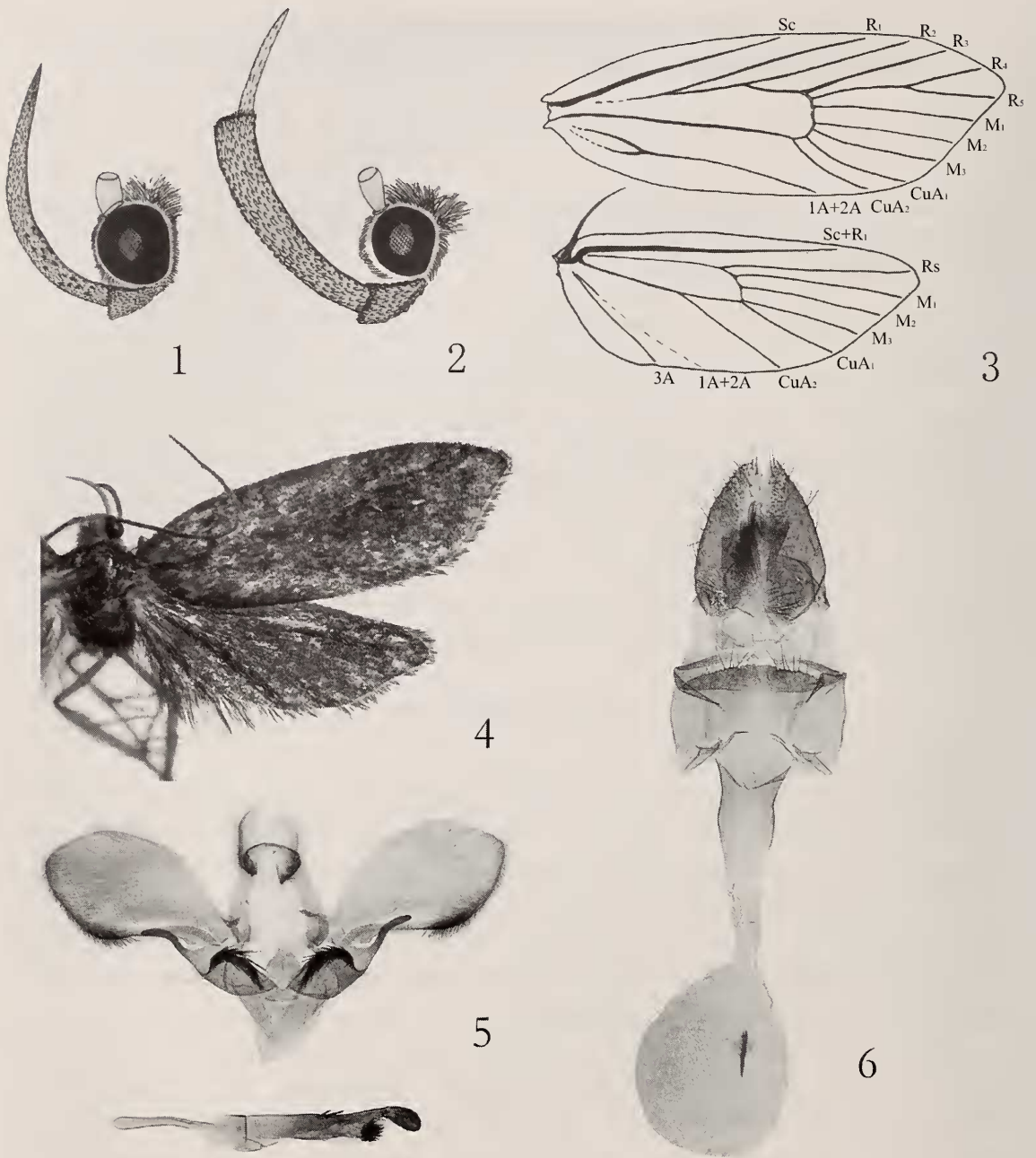
Adult (Figs. 1-3). Head with loosely appressed scales. Antenna filiform, scape without pecten. Labial palpus very long, recurved, thickened with appressed scales; two-segmented in male, three-segmented in female. Forewing broad; costa gently arched; R₁ originating from middle, R₄ and R₅ stalked, R₅ reaching termen, M₃ nearer to M₂ than CuA₁, CuA₁ arising from angle, CuA₂ from before angle, and CuP absent. Hindwing elongate-ovate, M₃ and CuA₁ connate from angle, CuP absent. Abdominal terga with spiniform setae.

Male genitalia: Uncus absent. Gnathos very large, forming an irregularly rounded plate, without lateral arms. Tegumen developed. Valva symmetrical, short and broad, without process or verruca at base of dorsal margin; sacculus developed, dorsally with a cluster of spines in basal part. Transtilla absent. Aedeagus relatively slender, distally with spiniform setae.

Female genitalia: Apophysis anterioris short and strong, large thornlike. Ostium set on the anterior edge of 8th sternum. Ductus bursae partially sclerotized. Corpus bursae with large spine-shaped signum.

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Figs. 1-6. *Epiracma dilatata* gen. nov. and sp. nov.: 1. Head (σ), holotype; 2. head (ρ), paratype; 3. wing venation (σ), holotype; 4. adult (σ); 5. male genitalia (Slide No. W01249); 6. female genitalia (Slide No. W01250).

Diagnosis. *Epiracma* gen. nov. is closely allied to *Irepacma* Moriuti et al., *Ripeacma* Moriuti et al. and *Periacma* Meyrick by forewing broad and labial palpus two-segmented in male. However, it can be distinguished from them by uncus absent and gnathos without lateral arms in the male genitalia as well as by apophysis anterioris thick and thornlike in the female genitalia. *Epiracma* gen. nov. can be further separated from its three allies by both male and female genitalia: from *Irepacma* by sacculus dorsally with a cluster of spines and apophysis

anterioris well developed, while sacculus lacks clustered spines and apophysis anterioris is completely absent in *Irepacma*; from *Ripeacma* by transtilla absent and apophysis anterioris strong and thornlike, while transtilla is well developed and apophysis anterioris is obviously long and thin in *Ripeacma*; from *Periacma* by valva without process or verruca at base of dorsal margin and apophysis anterioris thick and thorn-shaped, while valva has well produced process or verruca and apophysis anterioris is long and rather slender in *Periacma*.

Etymology. The generic name is an anagram formed by reordering the letters of the genus name, *Periacma* Meyrick.

Epiracma dilatata sp. nov.

Figs. 4 - 6

Type data. Holotype ♂, China: Mt. Fanjing (27.55° N, 108.41° E), Guizhou Province, alt. 1390 m, 29 May 2002, leg. Xinpu Wang, genitalia slide No. W01249. Paratype 1♀, 28 May 2002, other data as for holotype.

Adult (Fig. 4). Wing expanse 17.5 mm. Head orange yellow. Labial palpus orange yellow, tinged with blackish scales on lateral surface of second segment; male second segment becoming slender toward distal end, pointed at apex; female second segment thickened, third segment rather slender, about 1/2 as long as second. Antenna with dorsal surface dark brown, ventral surface grayish yellow. Thorax, tegula and wings evenly dark brown, somewhat deeper in female. Forewing with costal margin slightly arched, termen quite oblique, apex roundly protruded. Legs gray.

Male genitalia (Fig. 5): Uncus absent. Gnathos a large irregularly rounded plate, finely setose and weakly sclerotized along lateral margin, much shorter than tegumen. Tegumen developed, widely band-shaped. Valva broad, more or less elliptical, narrowed at base, bluntly rounded at apex, marginally set with dense fine setae. Sacculus with basal 3/5 broad, somewhat elliptical, edged with a cluster of spiniform setae along dorsal margin; distal process long and slender, slightly curved, apex rounded. Saccus large triangular. Juxta large, its basal portion broadened, distal portion narrowed, posterior margin almost straight. Aedeagus slender, basal 2/5 thin, somewhat handlelike; distal 3/5 thick and straight, with several spines at about 2/3; a small hairy patch set at about 5/6; distal 1/6 a small dilated process.

Female genitalia (Fig. 6): Papilla analis developed, somewhat broadly conical, densely setose. Apophysis posterioris relatively thick, nearly as long as papilla analis. Apophysis anterioris short and strong, thornlike, about 1/4 length of apophysis posterioris. Ductus bursae with basal half thickened and sclerotized, distal half narrow and membranous. Corpus bursae slightly shorter than ductus bursae, somewhat long elliptical in shape. Signum a relatively small sclerotized spine, with one edge dentate, basal plate irregularly quadrangular and weakly sclerotized.

Diagnosis. This species is similar to *Epiracma aedeagifera* (Wang, Liu et Li), but can be distinguished from it by gnathos being much shorter than tegumen, sacculus with distal process not band-shaped and aedeagus distally with a dilated process in the male genitalia; signum relatively small, its basal plate irregularly quadrangular in the female genitalia. In *E. aedeagifera*, the gnathos is nearly as long as tegumen, the sacculus is a strong and curved band-shaped process distally and the aedeagus has a long leaflike process distally in the male genitalia; the signum is large, its basal plate roughly rounded in the female genitalia.

Etymology. This specific name is derived from the Latin *dilatatus* (dilatate), in reference to the distally dilated aedeagus.

***Epiracma aedeagifera* (Wang, Liu et Li, 2002) comb. nov.**

Figs. 7 - 9

Irepacma aedeagifera Wang, Liu et Li, 2002: 64.

Adult (Fig. 7). Wing expanse 20.0-23.0 mm.

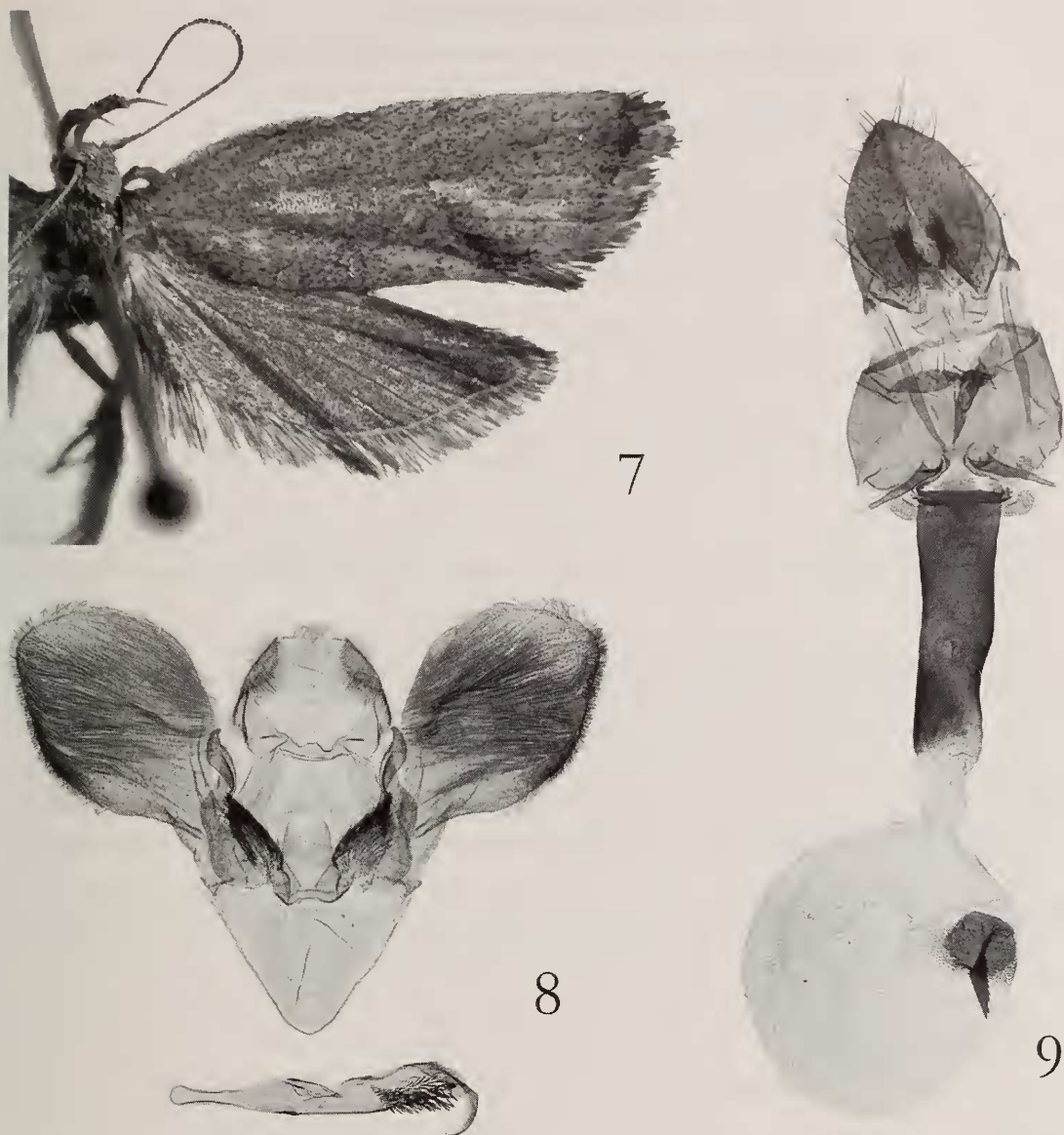
Male genitalia (Fig. 8): As illustrated.

Female genitalia (Fig. 9): Papilla analis developed, posterior margin somewhat rounded, setose. Apophysis posterioris stout, nearly as long as papilla analis. Apophysis anterioris about 1/2 as long as apophysis posterioris. Ductus bursae with basal 3/4 heavily sclerotized and parallel sided, distal 1/4 slightly narrow and membranous. Corpus bursae rounded, shorter than ductus bursae. Signum a large spine, with one edge sawlike, basal plate irregularly rounded and sclerotized.

Material examined. Holotype ♂, China: Mt. Qingcheng (30.58° N, 103.31° E), Sichuan Province, 1 June 1979, collector unknown (deposited in the Insect Collection, College of Life Sciences, Nankai University). Paratype 1 ♂, 5 June 1979, other same data as holotype (deposited in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China).

Additional material. 2 ♂♂, 2 ♀♀, China: Mt. Fanjing (27.55° N, 108.41° E), Guizhou Province, alt. 1390 m, 28-29 May 2002, leg. Xinpu Wang.

Distribution. China (Guizhou, Sichuan).



Figs. 7-9. *Epiracma aedeagifera* (Wang, Liu et Li): 7. adult (♀); 8. male genitalia; 9. female genitalia.

Remarks. *Epiracma aedeagifera* (Wang, Liu et Li) is transferred from *Irepacma* Moriuti, Saito et Lewvanich, and its female is described for the first time. This species is characterized by the band-shaped and curved distal process of sacculus in the male genitalia and by the large and long thornlike apophysis anterioris in the female genitalia.

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